**LESSON PLAN**

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| **Lesson** | Pre Solo Check & First Solo | **Instructor** |  | **Class/Group** |  |
| **Location** | Maps & Simulation Room | **Date / Time** | / | **Equipment** | Flight Sim |

**INTRODUCTION**

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| **Interest** | To develop your piloting skills in preparation for a Gliding Scholarship in the Vigilant | |
| **Need** | To ensure competency before first solo flight. | |
| **Title** | Pre Solo Check & First Solo  **REF – FTP 124 (P49 - 50)** | |
| **Revision** | * Attitudes * Transition * Lookout * Approach | * FRC’s * Co-ordinated Controls * Medium Turns * PLATOs |
| **Objectives** | * By the end of this lesson you will be able to:   + To fly a normal circuit and landing. | |
| **Scope** | This lesson will last 2 hours | |
| **Handouts** |  | |

**DEVELOPMENT**

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| **Content** | **Notes** |
| Flight Simulator Scenario: The simulator should be launched using the Grob G109B Vigilant at an appropriate airfield in a parking spot. | |
| Each exercise should be followed by the cadet(s) practicing that exercise. | |
| **1. Airmanship.** | 5 min. Solo check will consist of minimum 3 circuits and at least 1 simulated PLATO. |
| **2. Several minor differences.** | 5 min. During take-off ground run will be slightly shorter. Aircraft will have a tendency to pitch up slightly more. It will climb slightly quicker. The elevator will be more responsive and the aircraft will float longer during the hold off. |
| **3. Rules of the air test.** | 20 min. Must pass a simple test of rules of the air. |
| **4. Collision avoidance.** | 5 min. Following general rules of the air, apply to all aircraft. |
| **4.a.** | 2 min. Even under ATC, the pilot has responsibility to ensure aircraft does not collide with another. |
| **4.b.** | 2 min. Aircraft are not to flown so close to other aircrafts as to be a hazard. |
| **4.c.** | 2 min. Formation flying is only to be carried out when all pilots agree. |
| **4.d.** | 2 min. An aircraft which should give way shall avoid passing over, under or ahead of the other aircraft unless well clear. |
| **4.e.** | 2 min. An aircraft which has right of way shall maintain its course and speed unless there is risk of collision. |
| **4.f.** | 2 min. A tug and glider combination is considered to be a single aircraft under the command of the tug pilot. |
| **5. Converging.** | 5 min. Some aircrafts have priority over others. |
| **5.a.** | 1 min. Flying machines give way to airships, gliders and balloons. |
| **5.b.** | 1 min. Airships give way to gliders and balloons. |
| **5.c.** | 1 min. Gliders give way to balloons. |
| **6.** | 2 min. ‘On the right is in the right.’ |
| **7. Approaching head on.** | 2 min. If approaching head on each aircraft must alter its heading to the right. |
| **8. Overtaking.** | 2 min. The aircraft being over taken has right of way. Overtaking aircraft must pass to right and keep well clear. If both aircraft are gliders overtaking aircraft can pass left or right. |
| **9. Priority when landing.** | 5 min. Lowest aircraft has right of way unless: ATC has given higher priority, lower aircraft has cut in front or a higher aircraft is making emergency landing. |

**CONSOLIDATION**

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| **Summary**  The cadet(s) have now learnt the rules of the air and completed a solo flight. Congratulations! |
| **Test Learning**  Ask a cadet to fly a circuit. |
| **Restate Objectives**  By the end of this lesson you will be able to:   * + To fly a normal circuit and landing. |
| **Student Questions** |
| **Review and Look Forward**  **End of course.** |